Content Standard	***MAFS.5.G*** *Geometry* ***MAFS.5.G.1*** *Graph points on the coordinate plane to solve real-world and mathematical problems.* **MAFS.5.G.1.1** Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., *x*-axis and *x*-coordinate, *y*-axis and *y*-coordinate).
Assessment Limits	Whole numbers. Use only points located in the first quadrant of the coordinate plane. Plotting points given the ordered pair is aligned to MAFS.5.G.2.
Calculator	No
Acceptable Response Mechanisms	Graphic Response – Drawing/Graphing Multiple Choice Response Multi-Select Response
Context	No context

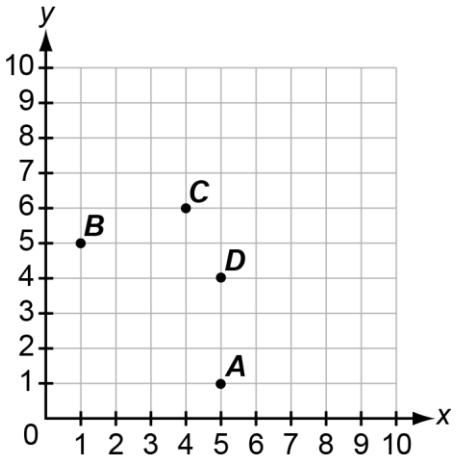
Example	
Context	Give coordinates of one point and direction to another point.
Context easier	Same coordinate values for both *x* and *y*.
Context more difficult	Different coordinate values for both *x* and *y*.

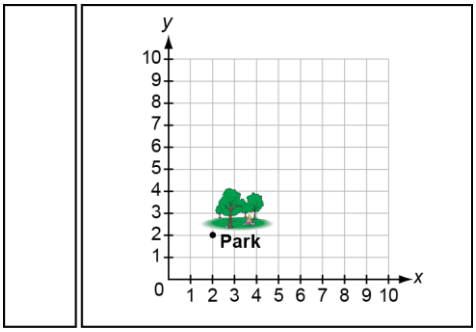
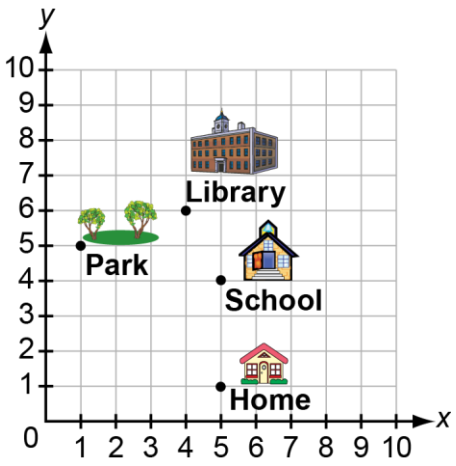
Sample Item Stem	Response Mechanism	Notes, Comments
Point *M* is 3 units away from the origin in the direction of the *x*-axis, and 3 units away in the direction of the *y*-axis. What could be the coordinates of point *M*? A. (0, 3) B. (3, 3) C. (3, 6) D. (6, 6)	Multiple Choice Response	

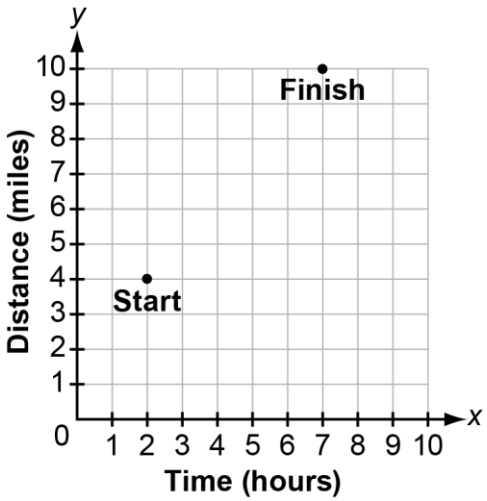
Point *M* is 3 units away from the origin on the *x*-axis. What could be the coordinates of point *M*? A. (0, 3) B. (3, 0) C. (3, 3) D. (3, 6)	Multiple Choice Response	
Point *M* is 3 units away from the origin in the direction of the *x*-axis, and 5 units away in the direction of the *y*-axis. What could be the coordinates of point *M*? A. (3, 5) B. (5, 3) C. (3, 8) D. (5, 8)	Multiple Choice Response	
Point *T* is 6 units away from the origin on the *x*-axis. Select all coordinates that could represent point *T.* ○ (0, 6) ○ (6, 0) ○ (-6, 6) ○ (-6, 0) ○ (0, -6)	Multi-Select Response	
A point is located as described. • 4 units away from the origin in the direction of the *x*-axis, and • 4 units away from the origin in the direction of the *y*-axis Use the Add Point tool to plot the point.	Graphic Response – Drawing/Graphing	
A point is 3 units away from the origin on the *y*-axis. Use the Add Point tool to plot the point.	Graphic Response – Drawing/Graphing	

A point is located as described. • 3 units away from the origin in the direction of the *x*-axis, and • 4 units away from the origin in the direction of the *y*-axis Use the Add Point tool to plot the point.	Graphic Response – Drawing/Graphing	

Content Standard	***MAFS.5.G*** *Geometry* ***MAFS.5.G.1*** *Graph points on the coordinate plane to solve real-world and mathematical problems.* **MAFS.5.G.1.2** Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.
Assessment Limits	Whole numbers. Use only points located in the first quadrant of the coordinate plane. Mathematical and real-world problems must have axes scaled to whole numbers (not letters).
Calculator	No
Acceptable Response Mechanisms	Graphic Response – Drag and Drop, Drawing/Graphing Multi-Select Response Multiple Choice Response Matching Item Response
Context	Allowable
Example	
Context	Give coordinates of one point and direction to another point. Generally includes some points that are on an axis.
Context easier	Give actual coordinates or points plotted. Generally includes some points that have the same *x*-and *y*-coordinate.
Context more difficult	Give only directions, no coordinates. Give distances from both axes (assuming that distances are different – if distances are the same, this should be medium difficulty). Generally includes some points that have different *x*-and *y*-coordinates.

Sample Item Stem	Response Mechanism	Notes, Comments
Which point is located at (5, 1) on the coordinate grid?  A. Point *A* B. Point *B* C. Point *C* D. Point *D*	Multiple Choice Response	
Use the Add Point tool to plot the point (3, 4).	Graphic Response – Drawing/Graphing	
Point *A* has the coordinates (3, 5). Point *B* is located 5 units above point *A*. Drag points *A* and *B* to show their locations in the coordinate plane.	Graphic Response – Drag and Drop	
Point *A* is located on the *x*-axis. Point *B* is located 5 units above point *A*. Drag points *A* and *B* to show their locations in the coordinate plane.	Graphic Response – Drag and Drop	
Point A is located 5 units below and 4 units to the left of point B. Drag points *A* and *B* to show their locations in the coordinate plane.	Graphic Response – Drag and Drop	

The location of the park in Dan's town is shown in the coordinate plane.  Dan left home, went 3 units up and 4 units right, and got to the park. Use the Connect Line tool to plot a point that indicates the location of Dan's house.	Graphic Response – Drawing/Graphing	
Some locations in Dan's town are shown in the coordinate plane.  Dan moved from one location to another by traveling 1 unit left and 5 units up. Which ways could he have travelled? A. From home to the park B. From the park to the library C. From home to the library D. From school to the park	Multi-Select Response	

Sonia's trip is shown in the coordinate plane.  Select all the true statements. ○ Sonia travelled 3 miles. ○ Sonia travelled 5 miles. ○ Sonia travelled 6 miles. ○ Sonia's trip lasts 7 hours. ○ Sonia's trip lasts 5 hours.	Multi-Select Response	